REMARKS

Upon entry of the present amendment, claims 1-6, 8-20, 22-34, and 36-41 are pending. The Examiner has withdrawn claims 42-106 from consideration, stating "[i]f such claims were presented originally they would have been subjected to a restriction requirement." This determination is not understood, because the subject matter of claim 42 corresponds exactly to the subject matter of originally-filed claim 5, i.e., claim 5 was rewritten in independent form. Similarly, the subject matter of claim 68 corresponds exactly to the subject matter of originally-filed claim 19, i.e., claim 19 was rewritten in independent form. Thus, no additional searching is required to examine these claims and withdrawal of these claims from consideration is not warranted. Reconsideration is respectfully requested.

Claims 84-104 have been canceled, and claims 105-106 have been amended to correct antecedent basis.

No new matter has been added by this amendment.

Rejections under 103

Claims 1-6, 8-20, 22-34, and 36-41 were rejected for obviousness over Gorsek et al. in view of Guivar'H.

> Guivarc'H teaches the use of omega-3 polyunsaturated fatty acids for the treatment of inflammatory conditions. See the abstract, page 2 section 0005 and the claims. The above reference makes clear that the claimed omega-3 polyunsaturated fatty acids have anti-inflammatory activity. Treatment of ophthalmic inflammation is taught on page 2 section 0005 of the above reference. It would have been obvious to a person skilled in the art to incorporate an omega-3 fatty acid into the teachings of Gorsek, considering that the secondary reference teaches the anti-inflammatory properties of omega-3 fatty acids. One skilled in the art would have been motivated to combine the teachings of the above references, since one relates to the use of carotenoids in general in combination with a polyphenol, a glutathione precursor, a vitamin antioxidant and a lipoic acid in a pharmaceutical formulation for the treatment of ophthalmic inflammatory disorders, and

> the other relates to the use of omega-3 fatty acids as anti-inflammatory agents being used in ophthalmic field. It is generally considered prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is to be used for the very same purpose. The idea for combining them flows logically from their having being used individually in the prior art. Applicant has presented no evidence to establish the unexpected or unobvious nature of the claimed invention, and as such, claims 1-6, 8-20, 22-34 and 36-41 are properly rejected under 35 U.S.C. 103.

This rejection is traversed.

The independent claims presently under consideration are claims 1, 15, and 31. None of these independent claims require an omega-3 fatty acid. As was discussed in the previous response, Gorsek fails to describe the claimed compositions containing astaxanthin and methods of alleviating dry eye using such compositions. Guivarc'H contains no additional information to support an obviousness rejection of these claims.

The only claims currently under consideration that do require an omega-3 fatty acid are claims 5, 6, 19, and 20. Claims 5 and 6 depend from independent claim 1, and claims 19 and 20 depend from independent claim 15. Since the combination of Gorsek and Guivarc'H fails describe or suggest a composition that requires all of the required elements (a polyphenol, an astaxanthin, and an omega-3 fatty acid) or co-administration of these compounds, these claims are non-obvious over the cited art.

Moreover, the rationale for combining these two references is misplaced. In support of the combination, the Examiner states "[i]t is generally considered prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a composition which is to be used for the very same purpose." In this case, the Examiner characterizes the purpose of Gorsek as "pharmaceutical formulation for the treatment of ophthalmic inflammatory disorders", and characterizes the purpose of Guivarc'H as

"the use of omega-3 fatty acids as anti-inflammatory agents being used in ophthalmic field", thereby suggesting that both references have the same purpose - reducing inflammation of the eye. However, this characterization is not accurate.

The goal of Gorsek is to "protect and neutralize free radicals" (col. 1, lines 27-28), which Gorsek believes are responsible for "debilitating degeneration", i.e., "wearing out and breaking down" of eye parts "as we get older". Inflammation is neither disclosed nor suggested in Gorsek. Gorsek describes the treatment of specific diseases (age-related macular degeneration, cataracts, elevated ocular pressure, diabetic neuropathy, and glaucoma), and rather than reducing inflammation, teaches that "[t]he key to the unique formulation is a combination of specific nutrients that help to protect and neutralize free radicals that may damage vision in the body." (emphasis added) Gorsek indicates that free radical damage rather than inflammation is the underlying cause of these conditions.

Guivarc'H describes methods of treating inflammatory conditions and is focused on inflammatory conditions of the gastrointestinal tract. The word "ophthalmic" appears only once in the entire document (col. 1, paragraph 0005) and it is used in a very specific manner - to describe "extra-intestinal (systemic) involvement" associated with Inflammatory Bowel Disease (IBD; a.k.a. Crohn's Disease or ulcerative colitis). Guivarc'H then states that the extra-intestinal (e.g., ophthalmic, arthritic) conditions that occur during certain discrete phases of IBD are to be treated differently from the treatment regimens for the underlying intestinal disease. For clarification, the relevant passages of Guivarc'H are reproduced below:

> The etiology of the [IBD] disease is unknown, but the principal pathophysiology seems to be the result of a "hyper-inflammatory" condition within the GIT. During the intermediate and acute phases, extra-intestinal (systemic) involvement may occur, e.g., ophthalmic, arthritic. The systemic conditions themselves are inflammatory in pathophysiology, and present discrete management approaches.

No particular ophthalmic condition is described or suggested. Even if it was, the above passage indicates that a management of such an extra-intestinal condition is distinct from the management of the underlying intestinal inflammation for which Guivarc'H treats with omega-3 fatty acids. Thus, the Gorsek composition and the Guivarc'H compositions are not taught by the prior art to be useful for the same purpose.

In order to establish a prima facie case of obviousness, there must be a suggestion to combine the cited references. In this case, there no explicit or implicit suggestion to combine these two references. Thus, the evidence provided by the Examiner falls short of establishing a prima facie case for obviousness of the claimed invention.

Even if the Examiner had established a prima facie case for obviousness, Applicants can overcome the rejection with evidence of secondary indicia of non-obviousness such as surprising results and unexpected properties of the invention.

In the accompanying declarations, Applicants present clinical evidence of the unexpected and surprising results achieved with the claimed compositions. The signs and symptoms of ocular inflammation associated with dry eye in a controlled adverse environment (CAE) were evaluated before, during, and after 10-weeks of treatment with compositions described and claimed in the above-referenced patent application. Subjects in the Dry Eye Oral Supplement group were orally co-administered the claimed carotenoid/polyphenol composition (formula listed in Table A of the specification) together with an omega-3 fatty acid composition, and the subjects in the Placebo Multivitamin group were orally administered Centrum multivitamin composition (no omega-3 fatty acids were administered to this group). Prior to administration of test and control compositions, subjects were evaluated over a period of 3 weeks to establish a baseline followed by a double-masked, randomized, multivitamin-controlled, parallel-group, 5-

visit, single center, 10-week CAE study. Ophthalmic examinations and follow-up CAE challenges took place at weeks 3, 6, and 10. As described in the accompanying Declaration of Dr. Steven G. Pratt, the results of the study revealed a significant and surprising reduction in subjective evaluations of discomfort during CAE as well as objective determinations of ocular inflammation (lid edema, lid margin capping) following oral administration of the claimed compositions. In fact, Mr. George Ousler, who developed and supervised the now well-recognized and established CAE protocol as a model of dry eye syndrome evaluation had never seen a better reduction in symptoms of dry eye among the numerous treatment approaches he has evaluated using the CAE model (see accompanying Declaration of George W. Ousler III).

In view of the unexpected properties of the claimed compositions and methods, one of ordinary skill in the art would not find the claimed invention to be obvious over the teaching of Gorsek, Guivarc'H, or a combination of these references. In view of the foregoing amendments and clarifications, Applicants submit that the claims as amended are novel and nonobvious over the cited prior art and respectfully request withdrawal of this rejection.

CONCLUSION

Applicant submits that the application is in condition for allowance and such action is respectfully requested. Should any questions or issues arise concerning the application, the Examiner is encouraged to contact the undersigned at the telephone number provided below.

With a one-month extension of time, these documents are due on or before November 25, 2005. Applicants submit herewith a Petition for a One-Month Extension of Time, along with a check for the fee of $60.00. The Commissioner is hereby authorized to charge any additional fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 21534-002CIP.

Respectfully submitted,

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